

Master Plan Report

COYOTE CREEK TRAIL City of San Jose

Master Plan

**Approved by the City of San Jose
Parks & Recreation Commission**

March 2, 2005

**Approved by the City of San Jose
City Council
March 8, 2005**

Environmental Clearance

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COYOTE CREEK TRAIL

MASTER PLAN - MARCH 2005

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INTRODUCTION

Purpose

This study explores the creation of a multi-use trail along the Coyote Creek riparian corridor. The general purpose of the Master Plan Report is as follows:

- 1) Determine a preferred trail alignment**
- 2) Create a high quality trail experience**
- 3) Preserve natural and visual qualities of the Coyote Creek riparian corridor and promote future management thereof**

This class I day-use trail will be shared by pedestrian, bicycle, disabled, and equestrian users alike. The majority of the trail will consist of 12 feet of AC paving, 2 feet of aggregate shoulders on each side, and a 2-foot drainage swale on the inland side of the trail (see figure A below) as well as a short-term on street alignment.

The trail will be a major link in the Bay Area Ridge Trail system which is designated within the city system. The Coyote Creek Trail, along with other existing and proposed trails, will be part of a 100-mile city network comprised of riparian and overland trails. This segment will also serve as a bicycle commute route to downtown San Jose.

This master plan report addresses a section of the Coyote Creek Trail that runs approximately two and one half miles and extends from the Los Lagos Golf Course to Kelley Park. More precisely, Idlewood Drive to Phelan Avenue.

Public demand for a multi-use trail is high in San Jose, evidenced by passage of the Measure P Bond Fund, voted in by the citizens of San Jose in November of 2000. The City of San Jose recognizes that this trail connection will be of great value to the community, both as a transportation corridor and as a recreational resource.



Recreational trail use

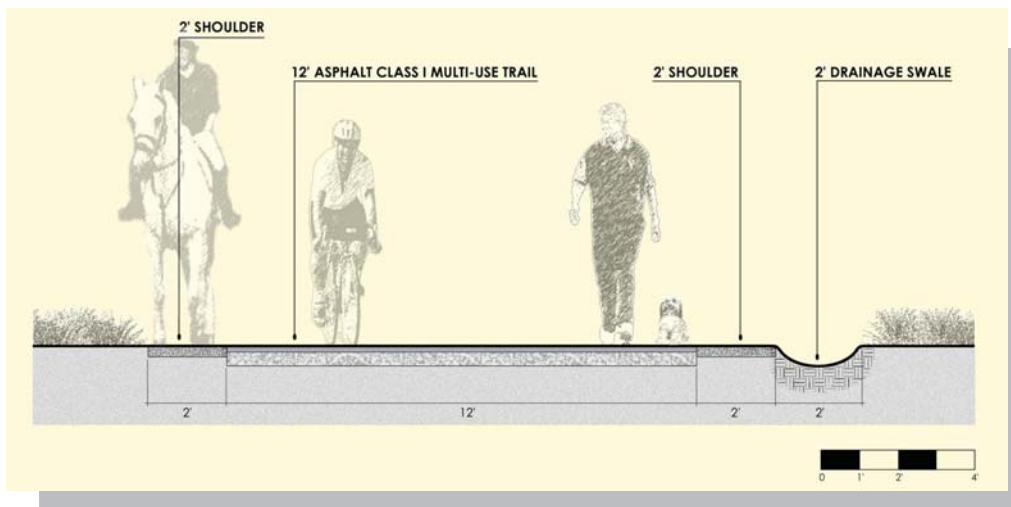


Figure A: Typical trail cross-section.

Study Area

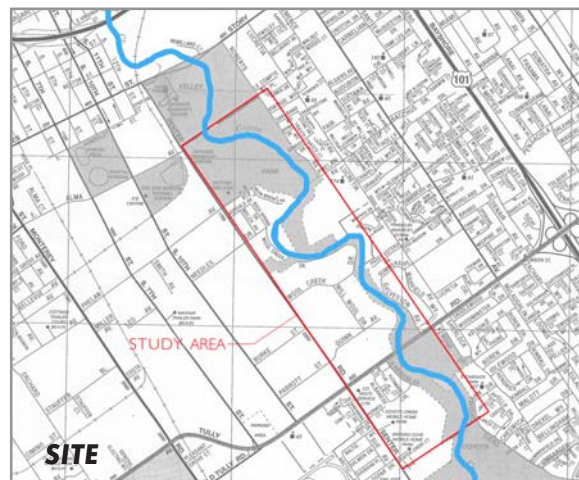
Coyote Creek is a major waterway in the valley. Several miles of trail along the Creek already exist as part of the City of San Jose and the County of Santa Clara's trail systems.

The approximately two and one half mile study area lies within the city limits of San Jose, in the heart of the Silicon Valley, on the southern rim of the San Francisco Bay Area. The trail will run along the eastern side of the Coyote Creek corridor, parallel to US 101. It is bisected by Tully Road, a major arterial roadway.

The trail is bordered by low and medium density housing, industrial uses, schools, city streets, and riparian habitat. The majority of the trail is on lands owned by the City of San Jose and the Santa Clara Valley Water District. The trail runs adjacent to several areas of community interest including the following:

- Los Lagos Golf Course
- Stonegate Park (Tot-lots and Skatepark)
- Stonegate Elementary School
- San Jose Police Horse Stables
- Central Branch Library
- Tully Road Ball Fields
- Galveston Community Gardens
- Yerba Buena High School

The Coyote Creek channel generally contains the 100 year flood plain, although in selected areas, the flood waters may leave the channel at more frequent intervals.





Community outreach meeting



Gathering input

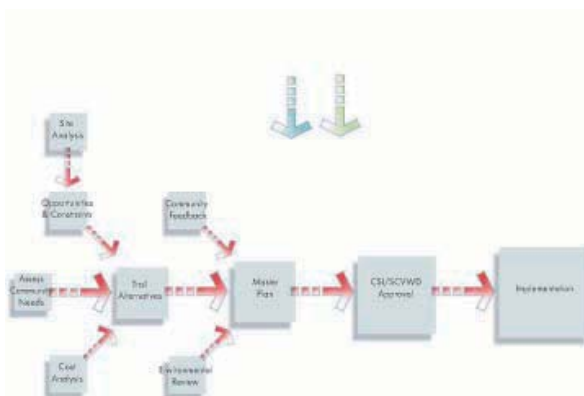
The Planning Process

The following specific objectives guided the planning process throughout the Coyote Creek Trail Master Plan:

- Assess community needs and desires in relation to a multi-use trail.
- Assess the full range of issues associated with a multi-use trail from safety and long-term maintenance needs to environmental impacts.
- Provide a thorough analysis of the site, including adjacent land uses, utilities, and flood-plain limits.
- Evaluate the opportunities and constraints associated with the implementation of a multi-use trail.
- Identify at least two potential trail route alternatives.

Major steps in the planning process included the following:

- Present two potential trail route alternatives to the community in a series of public meetings and gather their feedback. Identify their preferences and specific issues associated with each alternative.
- Formulate a Preliminary Estimate of Probable Construction Cost for each alternative.
- Meet with the Technical Advisory Committee and review the community input and the Preliminary Estimate of Probable Construction Cost. Identify one preferred trail Route for further detailed study.
- Compile an Environmental Impact Report for the preferred trail route.
- Promote citizen advocacy for implementation and funding.
- Obtain City of San Jose and SCVWD approval of Final Master Plan.



Project Goals

The following goals were established during the planning process to guide the Master Plan development and the chosen trail alignment. The goals provide a vision that will be carried through to construction implementation. The project objectives are based upon feedback gathered at the Technical Advisory Committee meetings, community meetings, and from participating agencies.

- Plan for a multi-use commuter and recreation trail (Class I).
- Create a high quality trail experience.
- Promote bicycle use as a transportation alternative for commuters.
- Preserve the natural and visual qualities of the Coyote Creek riparian corridor.
- Provide a favorable relationship with adjacent parks, schools, residential, and commercial areas.
- Consider new and future developments up and downstream.
- Minimize multiple-use conflicts.
- Provide a trail suitable for a broad range of users.
- Provide a forum for community involvement in the planning process
- Address the expressed needs and desires of the community.
- Explore new park and recreation opportunities.
- Interpret the natural and historic resources along the trail.
- Provide signage that educates the public on sensitive creek habitats & discourages access to the creek off of the trail.
- Plan for a trail that will be feasible for implementation within budgetary constraints.
- Set priorities and identify development phases.



Traffic on city streets has commuters considering alternatives



Recreational use

EXISTING CONDITIONS

Summary

The existing conditions along the Coyote Creek corridor offer a significant number of opportunities for a quality trail experience as well as presenting several constraints. Throughout the Coyote Creek corridor, there are stretches of riparian habitat that are home to a diverse group of native plant and wildlife species. While offering a valued trail experience, care must be taken to minimize impact upon these sensitive lands. There are also stretches of oak woodland and open grassland, both containing a mix of native and exotic species. The corridor extends out of the creek channel to include lands adjacent to city streets, schools, parks, gardens, housing, industrial development, and a variety of other public and privately owned lands.



Habitat at Coyote Creek (springtime)



Figure C: Map of Coyote Creek watershed



Coyote Creek (mid summer flows)

The Coyote Creek watershed spans approximately 322 square miles, gathering runoff from the cities of Morgan Hill, San Jose, and Milpitas. It is joined by several tributaries as it flows north to San Francisco Bay. Throughout its course, it runs through both rural and urban environments.



Figure D: Coyote Creek Corridor - Reach 1

Due to the large scale of this study, the Coyote Creek corridor has been split into the following 5 individual “reaches” for clarity of discussion:

- Reach 1: Los Lagos Golf Course to SJ Police Horse Stables
- Reach 2: SJ Police Horse Stables to Tully Rd.
- Reach 3: Tully Rd. to Galveston Ave. & Summerside Dr.
- Reach 4: Galveston Ave. to Carroll Property
- Reach 5: Carroll Property to Kelley Park

The descriptions will be arranged heading downstream throughout the corridor (south to north).



Existing AC path at Los Lagos Golf Course - Possible start of Coyote Creek Trail.



Stonegate Tot Play Area

Reach 1 - Existing Conditions, Opportunities & Constraints:

(Reach 1 spans from Los Lagos Golf Course to the San Jose Police Horse Stables).

Reach 1 begins at the northern limits of Los Lagos Golf Course, which parallels Gassmann Dr. At this point, an existing asphalt (AC) path terminates after running adjacent to the golf course. This path provides an opportunity for the Coyote Creek Trail to make a connection with trail networks to the south. Gassmann Drive briefly runs parallel to the corridor at this point, providing an opportunity for maintenance or emergency vehicular access to the trail. This area also marks the beginning of Stonegate Park, which includes several picnic areas, one tot play area, one youth play area, and a skate park. All of these elements function as constraints to the layout of a trail because they represent constructed items that cannot be conveniently relocated. Their location must be considered when choosing the best trail alignment.

The play fields of Stonegate Elementary School (lands of Franklin McKinley School District) lie immediately to the east, forming an eastern boundary to the corridor.



Gassmann Dr. & Stonegate Elementary School

Throughout the entire “reach”, the fenced “top of bank” marks the limit of the creek channel. All possible trail routes in Reach 1 will need to avoid the creek channel due to the extremely dense vegetation and the steepness of its banks.

Reach 1 extends to the southern boundary of the San Jose Police Horse Stables fence. The creek corridor in Reach 1 is entirely contained within the lands owned by the City of San Jose.

(Note: See Appendix B & C for scaled maps that illustrate the Site Analysis and the Opportunities & Constraints of the study area.)



Southern Terminus of San Jose Police Horse Stables



Figure E: Coyote Creek Corridor - Reach 2

Reach 2 - Existing Conditions, Opportunities & Constraints:

(Reach 2 spans from the southern limits of the San Jose Police Horse Stables to Tully Road.)

Reach 2 begins at the southern limits of the San Jose Police Horse Stables fence. This area has extremely dense vegetation in the creek channel, and a steep bank. There is a land shelf on the “top of bank” that lends an opportunity for a trail alignment. However, the Police Horse Stables fence line (lands of the City of San Jose) blocks the passage of a trail for approximately 100 yards. Continuing north along the corridor, the land shelf continues through a mix of native and exotic vegetative species until it reaches a “remnant riparian woodland”. This environmentally sensitive area is a swale that historically functioned as an oxbow lake or a branch of Coyote Creek. A continuous trail corridor passing through this area must be sensitive to the existing environmental conditions.

Reach 2 continues along the land shelf (lands of the City of San Jose) and passes by the Tully Road

Ball Fields, a series of youth baseball / softball fields that constrain the eastern border of the corridor. The span of Reach 2 terminates at Tully Road. The Coyote Creek channel runs underneath the vehicular bridge at Tully Road, while the potential trail alignment at the “top of bank” continues east past the ball field staging area, parallel to Tully Road, approaching the Central Branch Library Site.

(Note: See Appendix B & C for scaled maps that illustrate the Site Analysis and the Opportunities & Constraints of the study area.)



Coyote Creek Corridor land shelf - Reach 2

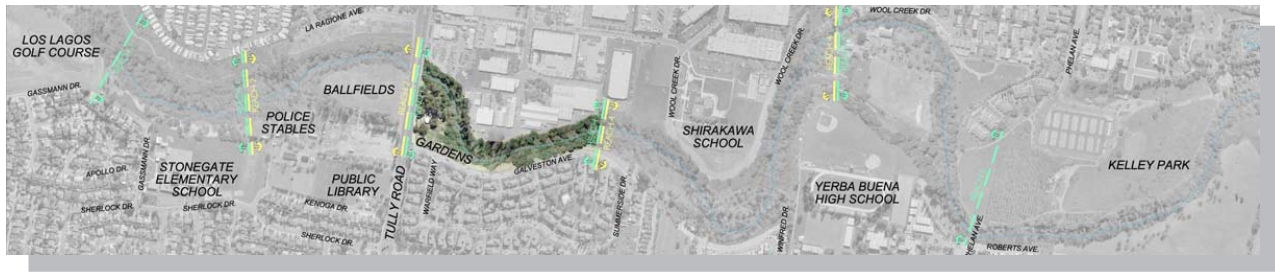


Figure F: Coyote Creek Corridor - Reach 3

Reach 3 - Existing Conditions, Opportunities & Constraints:

(Reach 3 spans from Tully Road to the corner of Galveston Avenue and Summerside Drive.)

Reach 3 begins at the southern side of Tully Road. There are two distinctly different possibilities for a trail alignment here. One begins where the Coyote Creek channel passes underneath the vehicular bridge and enters a rugged, dense river corridor characterized by steep banks and dense riparian vegetation. The second possible trail corridor remains out of the river channel, crossing Tully Road at Galveston Avenue (the location of a future traffic light and crossing).

Within the creek channel in this area, there are a mix of lands owned by the City of San Jose, the San Jose Water Company, and the Santa Clara Valley Water District. The Water Company fence and utilities constrain trail passage as does the close proximity of the creek water, the extremely steep river banks, and various areas of potential raptor nesting.



Tully Road Bridge crossing over Coyote Creek



Community Gardens & Galveston Ave. looking south towards the intersection with Tully Road.



Water utilities equipment

At the future traffic crossing where Galveston Avenue meets Tully Road, a possible trail corridor spans across the land shelf (lands of the City of San Jose), out of the creek channel. This area contains a small community garden that is highly valued by its users. Housing marks the eastern border across Galveston Avenue. The remainder of the land shelf contains a very steep bank and vegetation marked by traces of the oak woodland plant community.

The northern boundary of Reach 3 exists at the corner of Galveston Avenue and Summerside Drive.

(Note: See Appendix B & C for scaled maps that illustrate the Site Analysis and the Opportunities & Constraints of the study area.)



Figure G: Coyote Creek Corridor - Reach 4

Reach 4 - Existing Conditions, Opportunities & Constraints:

(Reach 4 spans from the corner of Galveston Avenue and Summerside Drive to the southern boundary of the lands of Carroll)

Reach 4 begins near the corner of Galveston Avenue and Summerside Drive. In the stretch of land that extends north from this point, there are a variety of land uses and land ownership. The Coyote Creek channel is large here and contains a continuous, isolated, stretch of riparian habitat that provide an opportunity for a valuable trail experience. The remnants of an orchard can also be found here. The isolation of this stretch also has a constraint due to limited access opportunities. The land in the creek channel belongs primarily to the City of San Jose with easements given to the Santa Clara Valley Water District. There are, however, several privately owned parcels within this reach, including within the floodway the lands of Carroll, being acquired by the City of San Jose for parkland.

On the eastern bank, there are several private parcels that are constraints to trail layout. One of these



Typical dense vegetation & steep banks at Coyote Creek



Remnant Orchard within the flood plain - Reach 4



Land shelf adjacent to housing on Jeneane Marie Circle

parcels extends to the centerline of the creek, prohibiting trail alignment here without purchase of an easement or acquisition of some portion of this property. Yerba Buena High School (lands of the East Side Union High School District) also owns a large piece of land that limits the location of a trail on the eastern bank.

On the western bank, the land outside of the creek channel is owned primarily by the Franklin McKinley School District and the City of San Jose. George Shirakawa Sr. Elementary School defines the western border of a possible trail corridor out of the creek channel. Trail alignment on the west bank would require a 240 foot bridge across the channel, having major fiscal and environmental impacts. An opportunity for a trail route exists on a portion of Wool Creek Drive that has been blocked off to vehicular traffic for several years to decrease traffic in the school area. However, officials at the Shirakawa School expressed safety concerns if the trail were located adjacent to the school. The northern end of the road is open to vehicular traffic adjacent to some light industrial land use. A parcel of land to the north is being acquired by the City of San Jose from the lands of Carroll.

(Note: See Appendix B and C for scaled maps that illustrate the Site Analysis and the Opportunities & Constraints of the study area.)



Wool Creek Drive behind George W. Shirakawa Sr. School



Corridor within the Coyote Creek channel - Reach 4



Figure H: Coyote Creek Corridor - Reach 5

Reach 5 - Existing Conditions, Opportunities & Constraints:

(Reach 5 spans from the southern limits of the lands of Carroll to the southern end of Kelley Park.)

Reach 5 begins within the creek channel at the south end of the privately owned lands of Carroll. The City of San Jose is currently acquiring this area. Land is also owned by the City of San Jose, San Jose Water Company, and the SCVWD. Within the creek channel there are opportunities for an outstanding trail experience throughout the expanses of riparian habitat. There are also areas that have been utilized by the Carroll property historically as grazing land and horse stables. There is a substandard vehicular bridge over



Corridor within the Coyote Creek channel - Reach 5

Coyote Creek as well as a small pedestrian bridge that historically provided access to the Carroll property from the west. Much of the land that will be acquired by the City of San Jose will be planned as a future recreational park.



Topographic shelf near Phelan Ave. & Roberts Ave. Yerba Buena High School on the left.

On the eastern bank of the creek in Reach 5, Yerba Buena High School (lands of the East Side Union High School District) lies on the top of the eastern bank, preventing a possible trail passage. The City of San Jose owns land on the 'top of bank' at the northwestern limits of Yerba Buena High School, near the corner of Roberts and Phelan Avenues. This area presents an opportunity to provide maintenance and emergency vehicle access to the vicinity and to function as a trailhead.



Rock Springs neighborhood park at corner of Wool Creek Dr. and Needles Dr.

The western bank of the creek contains a piece of land that is being acquired by the City of San Jose from the lands of Carroll. A section of Wool Creek Drive also exists in Reach 5. This is discontinuous from the portion in Reach 4. Rock Springs Neighborhood Park, a small linear park, exists on the eastern side of Wool Creek Drive, restricting possible trail right-of-way. At the corner of Wool Creek and Needles Drive, a housing complex extends very close to the 'top of bank', leaving minimal room for trail passage. In this area, the bank is also steep and densely vegetated.

In addition to riparian habitat in the creek channel, the northern expanses of Reach 5 include open grassland and a series of worn paths that may provide an opportunity to connect to Kelley Park. There is a large parking lot for Kelley Park that could possibly serve recreational trail users.

(Note: See Appendix B and C for scaled maps that illustrate the Site Analysis and the Opportunities & Constraints of the study area.)



Open grassland and worn path that connects to Kelley Park

TRAIL ALTERNATIVES

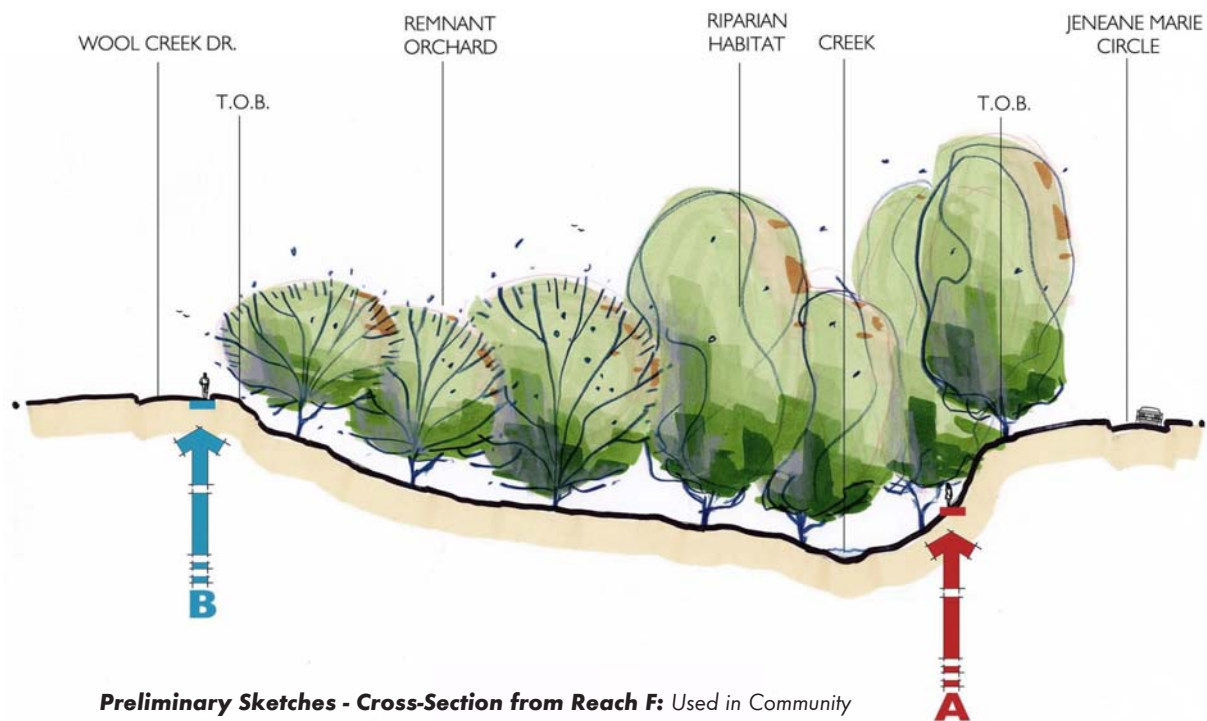
Evaluation of Trail Alternatives

For each reach of the Coyote Creek trail corridor, two or more concept level trail alignments were examined. The design team and the community evaluated the alternative trail alignments based on the following criteria:

- A continuous commuter and recreation trail (Class I bikeway).
- Connections with existing Coyote Creek Trail and other local trails.
- Reasonable acquisition and funding (cost)
- Minimal environmental impacts due to construction and trail usage
- Minimal impacts on adjacent land uses
- Visually interesting, trail experience
- Facilities for bicyclists, walkers, runners, equestrians and wheelchair users.
- Sufficient width to minimize multiple-use conflicts.
- Accessibility by security/police patrol
- Safety
- Minimization of maintenance costs

Plans and cross-sections were presented before the public during four community meetings to graphically illustrate the difference between the alternative trail routes. Community feedback was gathered on questionnaire forms and analyzed by the Technical Advisory Committee. The questionnaire was provided in English, Spanish, Vietnamese, and Cambodian. A consensus was reached at the community meetings. This alternative is presented in the following master plan chapter as the “preferred trail alignment”.

Note: See the following page for bar charts that illustrate the community feedback.



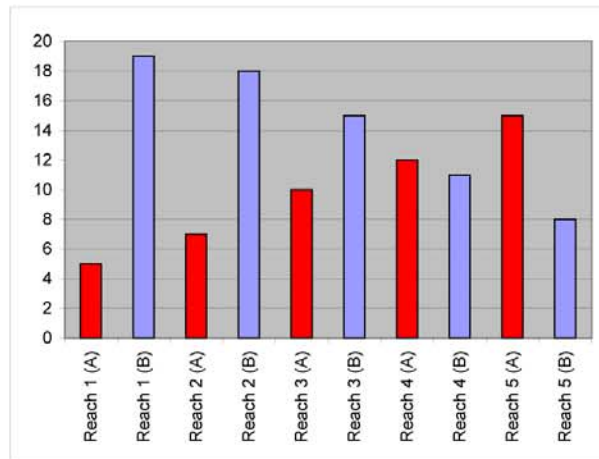
COYOTE CREEK TRAIL: COMMUNITY MEETING

(STONEGATE PARK TO PHELAN AVENUE)

Location: Kennedy Elementary School

Date: 8/13/03

Reach 1 (A)	5 (4%)
Reach 1 (B)	19 (16%)
Reach 2 (A)	7 (6%)
Reach 2 (B)	18 (15%)
Reach 3 (A)	10 (8%)
Reach 3 (B)	15 (13%)
Reach 4 (A)	12 (10%)
Reach 4 (B)	11 (9%)
Reach 5 (A)	15 (13%)
Reach 5 (B)	8 (6%)



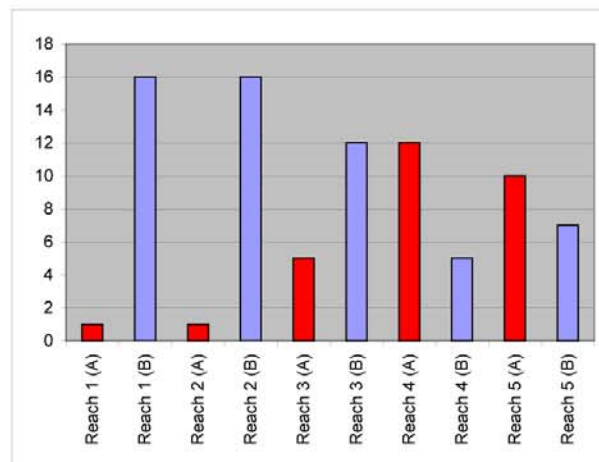
COYOTE CREEK TRAIL: COMMUNITY MEETING

(STONEGATE PARK TO PHELAN AVENUE)

Location: Stonegate Elementary School

Date: 8/14/03

Reach 1 (A)	1 (1%)
Reach 1 (B)	16 (19%)
Reach 2 (A)	1 (1%)
Reach 2 (B)	16 (19%)
Reach 3 (A)	5 (6%)
Reach 3 (B)	12 (14%)
Reach 4 (A)	12 (14%)
Reach 4 (B)	5 (6%)
Reach 5 (A)	10 (12%)
Reach 5 (B)	7 (8%)



COYOTE CREEK TRAIL: COMMUNITY MEETING

(STONEGATE PARK TO PHELAN AVENUE)

Location: Franklin McKinley School District Offices

Date: 8/20/03

Reach 1 (A)	0 (0%)
Reach 1 (B)	6 (20%)
Reach 2 (A)	4 (13%)
Reach 2 (B)	2 (7%)
Reach 3 (A)	3 (10%)
Reach 3 (B)	3 (10%)
Reach 4 (A)	4 (13%)
Reach 4 (B)	2 (7%)
Reach 5 (A)	4 (13%)
Reach 5 (B)	2 (7%)

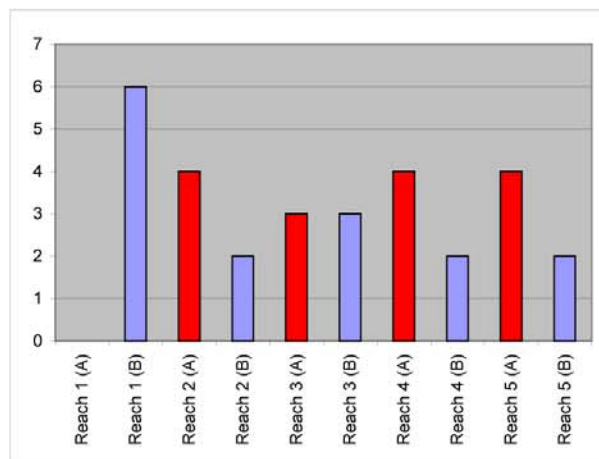


Figure 1: Community feedback: The above graphs illustrate the public opinion at 3 community meetings. This data influenced the formation of a "preferred trail alignment" during the planning process

COYOTE CREEK TRAIL MASTER PLAN

Description of Preferred Trail Alignment (proceeding northward)

Note: See following page for a fold-out plan, illustrating the proposed trail.

See Existing Conditions (pp 5-11) for a detailed analysis of the site throughout each reach.

Reach 1: The southern limits of the study area begin where it connects to an existing AC path at the northern edge of Los Lagos Golf Course. Proceeding north, the trail hugs the top-of-bank to the west of an existing picnic area as it approaches Stonegate Park Tot Lot. The trail runs along the fenced top-of-bank on the eastern side of the tot lot. This trail alignment requires some reconfiguration of the existing play equipment as well as caution striping and protective fencing (see figure J for a plan view of the relocated play equipment). This alignment was preferred in the community meetings since it minimized conflicts between pedestrians and cyclists. For the remainder of Reach 1, the trail stays near the top-of-bank and meanders through various existing trees to the east of the youth play area and Stonegate Skate Park. The trail reaches the southwestern boundary of the San Jose Police Horse Stables.

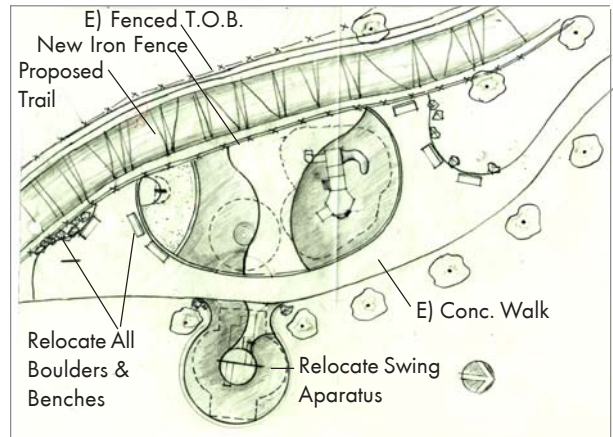
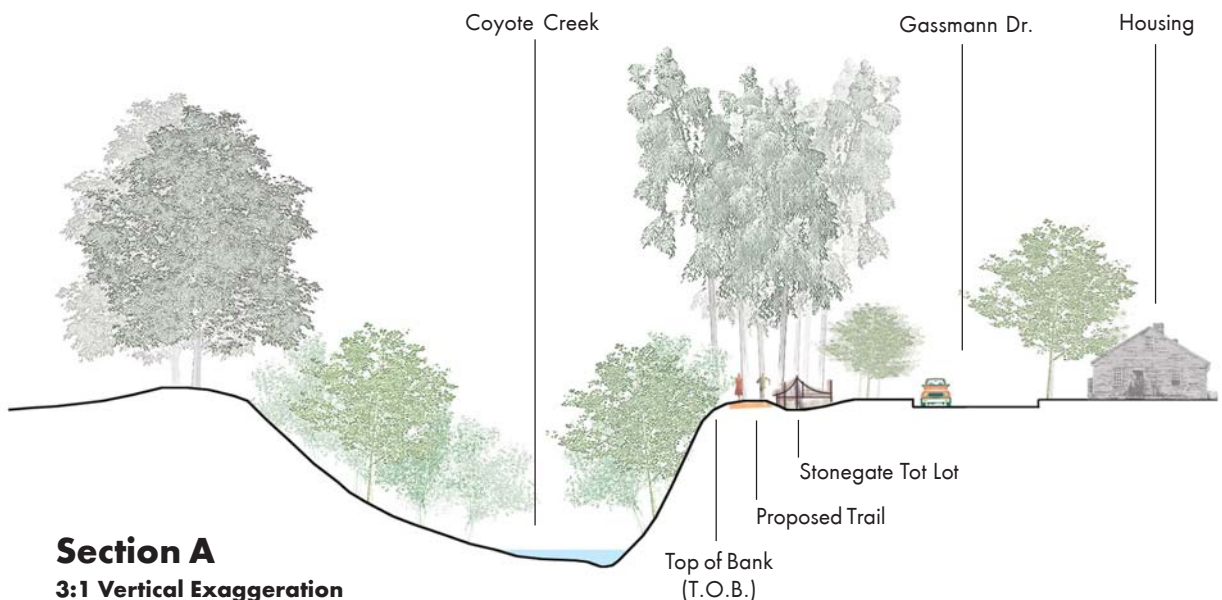


Figure J: Plan view - Rough sketch illustrating a possible reconfiguration of Stonegate Tot lot

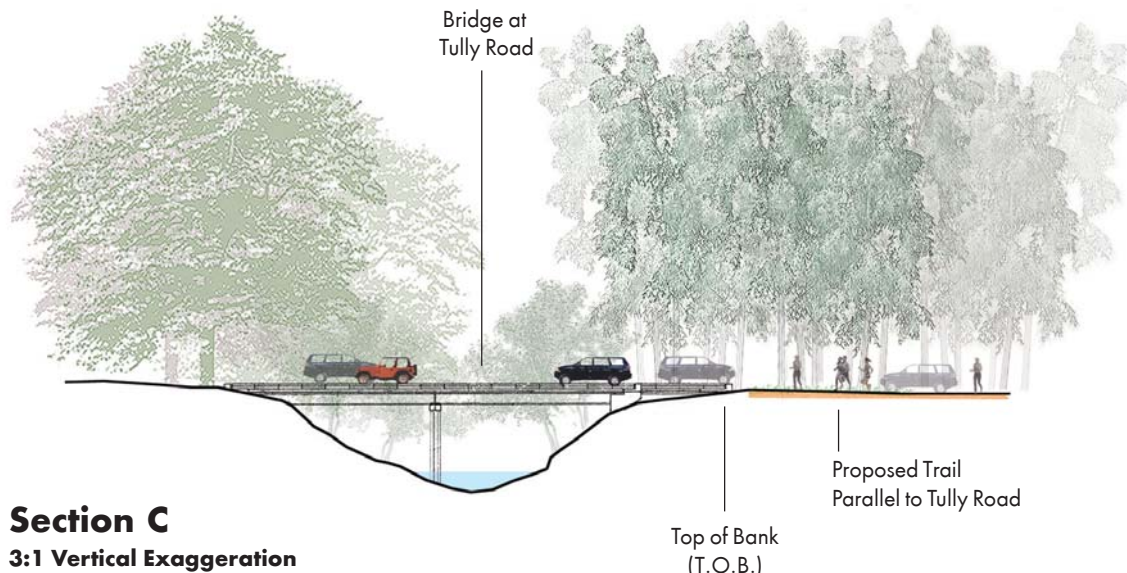
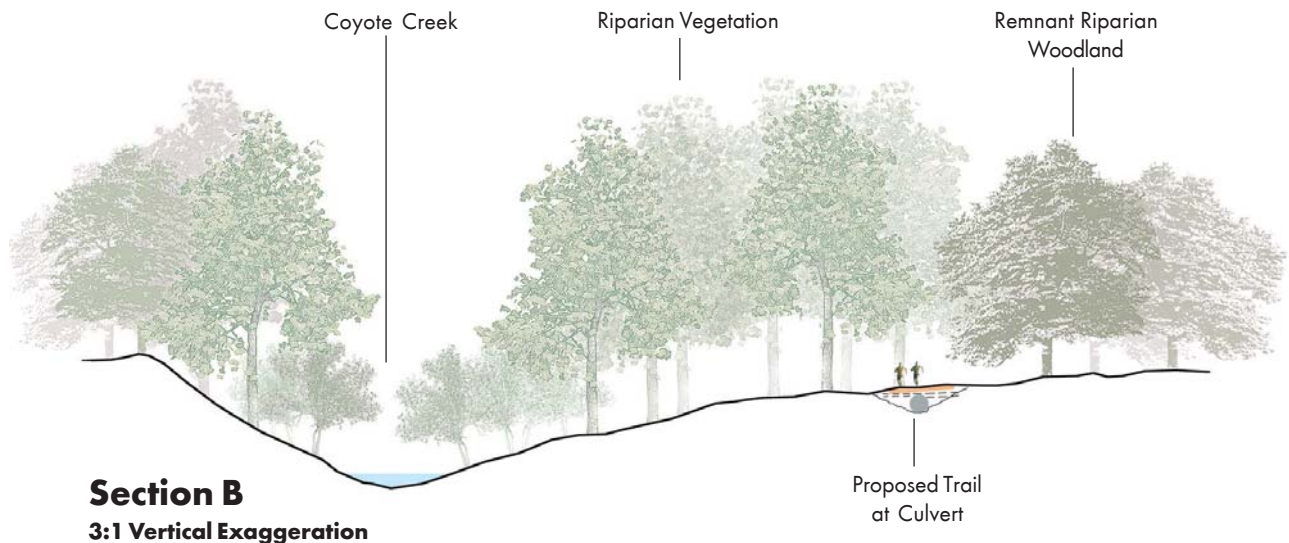


Reach 2: The trail continues north from the southwestern boundary of the San Jose Police Horse Stables. Realignment of the wooden rail fences will be required to provide a trail right-of-way through this area. Discussions with the San Jose Police Department indicate that a resulting reduction in their facility is acceptable.

The trail remains upon an existing land shelf until it crosses a swale. This crossing will require a concrete culvert pipe (see section B.)

The swale is part of a remnant riparian woodland. Bank stabilization treatments are needed to accommodate the slopes in this area.

Proceeding north, the trail routes around a pair of existing ballfields, remaining close to the top-of-bank. Upon reaching Tully Road, the trail heads east, running parallel to the street (see section C) until it reaches the new traffic signal at the intersection of Galveston Avenue and Tully Road.



Reach 3: The trail corridor at Reach 3 continues north from the intersection of Tully Road and Galveston Avenue. However, due to the conflicts with the Community Gardens and a lack of Right-of-Way, the trail at the beginning of Galveston Avenue will be discontinuous. Bicyclists will be accommodated on the surface street. Pedestrians will utilize the existing sidewalk on the eastern side of Galveston Ave and the new 5' concrete sidewalk on the west side of the street (see Figure K & Section D). A mid-block crossing will return pedestrians to the west side of Galveston Avenue, where the trail will start at the northern limits of the Community Gardens.

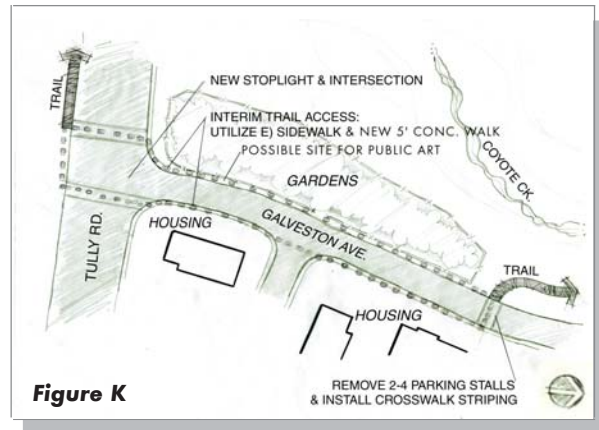
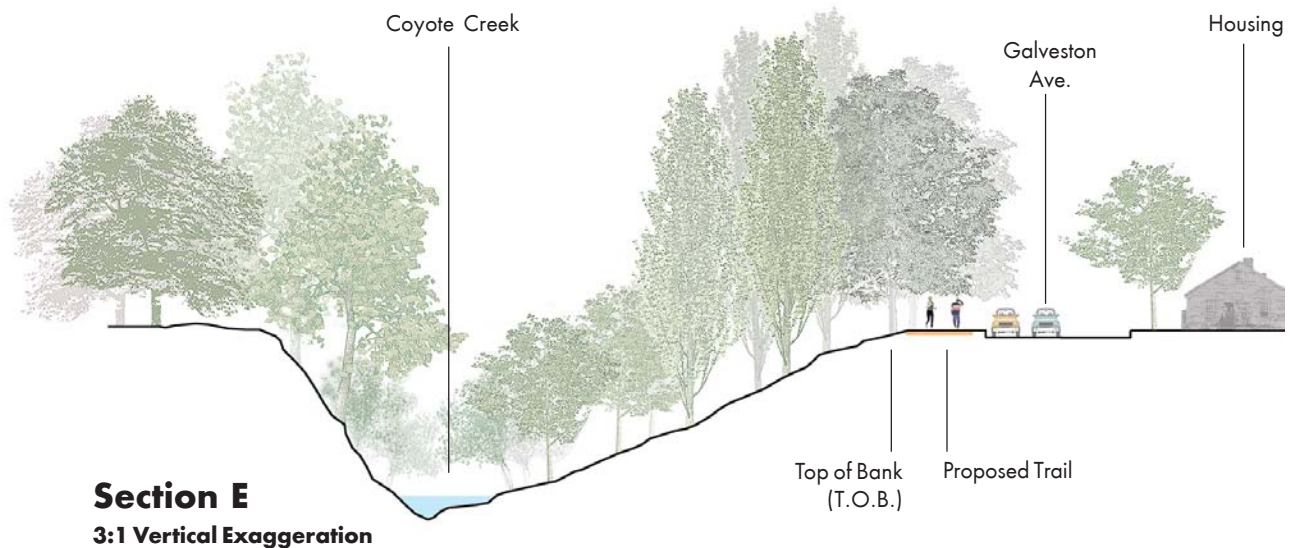
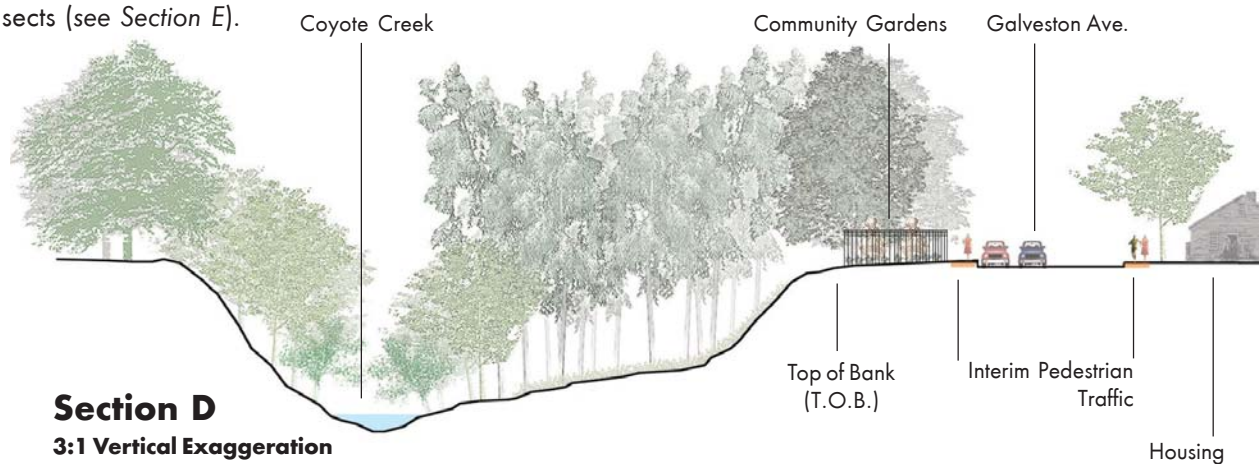


Figure K

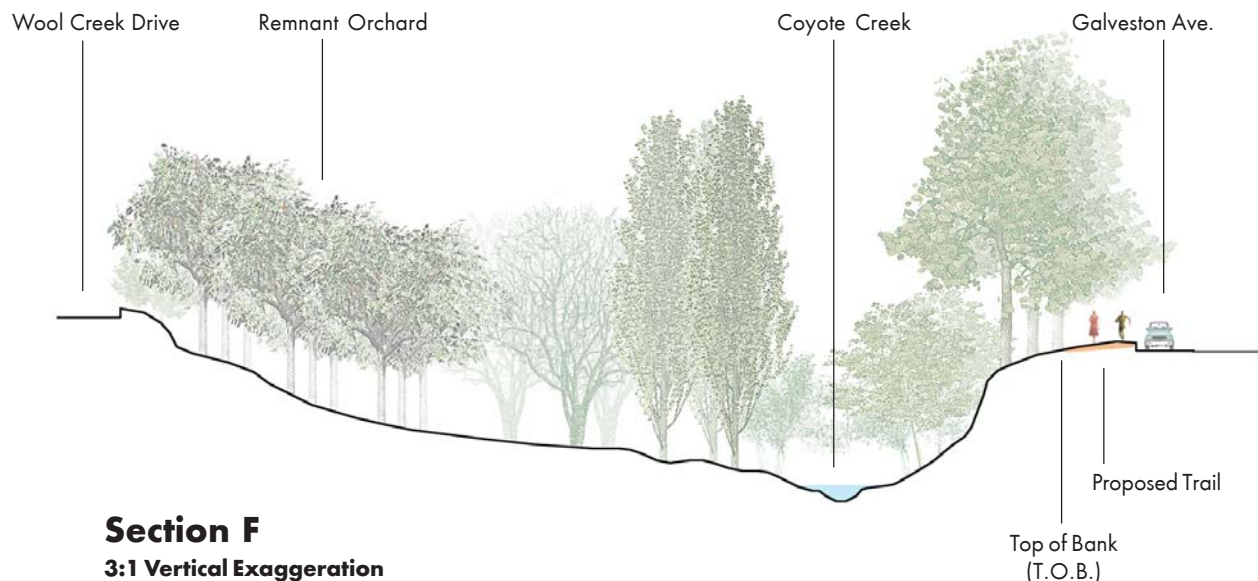
At the beginning of this off road portion of the trail will be a trail head. The trail proceeds along the land shelf, parallel to Galveston Avenue until it reaches the point where Summerside Drive intersects (see Section E).



Reach 4: In the ultimate alignment, this trail segment starts at the intersection of Galveston Avenue and Summerside Drive and ends at the Carroll Property in the creek channel. The **final alignment** of this portion of the trail will be in the creek channel but above the hundred year flood plan. However, this alignment requires acquisition of an easement or purchase of lands from a private land owner. Until this can be done, the **interim trail alignment** will be on the surface streets for a major portion of this reach.

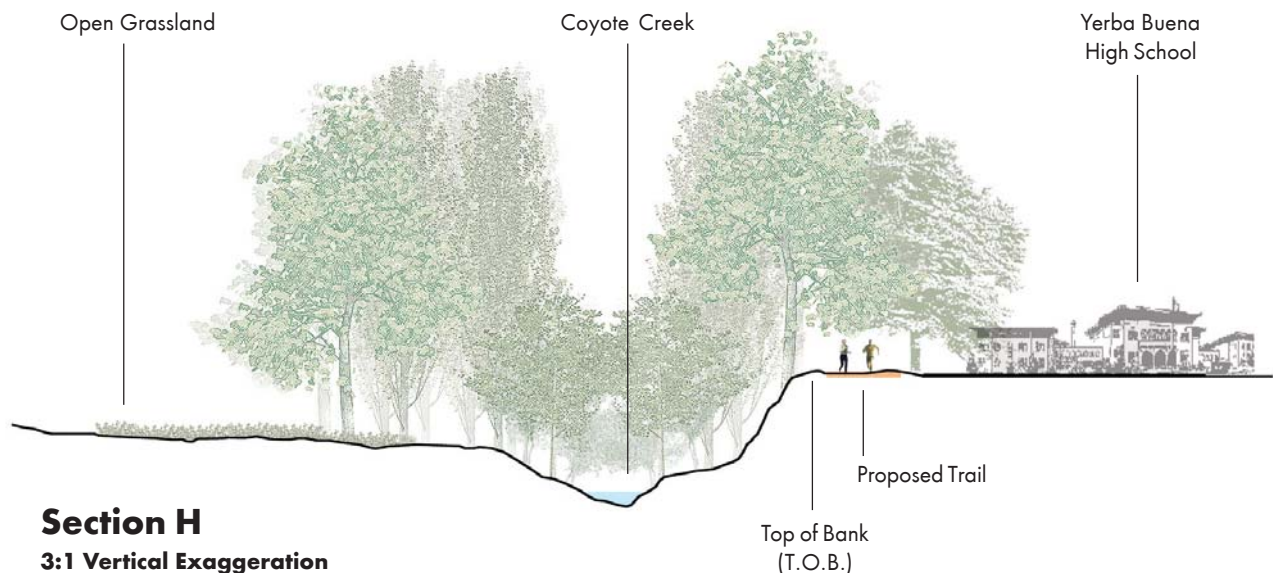
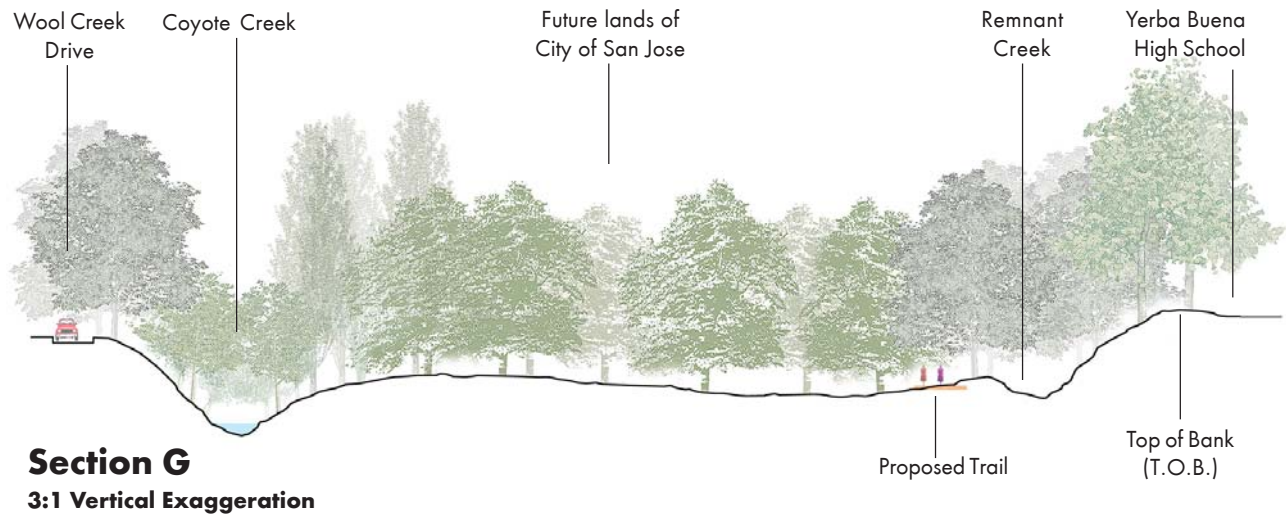
The **interim alignment** will use the existing sidewalks for pedestrians, while bicyclists and equestrians will use the surface streets. The route will follow Summerside Drive to Lucretia Avenue, continue south on Lucretia to Winifred Drive. Traffic safety improvements should be considered due to the high volume of traffic on Lucretia. The trail will then head west along Winifred until reaching the creek corridor again at the intersection of Winifred and Jeneane Marie Circle. At this point, there will be a small trailhead. The trail drops into the creek corridor and resumes the proposed **final alignment**.

The **final trail alignment** drops down into the creek corridor at the corner of Galveston Avenue and Summerside Drive. The trail proceeds north through the creek corridor until it climbs up its steep banks near Jeneane Marie Circle. This portion of the trail traverses through grasslands and woodlands in the creek channel but out of the hundred year flood plain. This segment of the trail would be approximately twenty feet below adjacent residences and set back a minimum of fifty feet from the homes. The trail will require bank stabilization treatments to accommodate the cross slope. The trail then proceeds along the existing land shelf parallel to Jeneane Marie Circle (see Section F), until a point just past where Winifred Drive intersects. Here, the trail traverses back down into the river corridor using bank stabilization treatments. The trail remains down in the creek corridor, briefly heading west as it contours around Yerba Buena High School. The trail at this point is well below the top of bank but is again out of the hundred year flood plain. The creek bows to the west at this point, creating a broad shelf suitable for the trail.



Reach 5: The trail continues around Yerba Buena High School within the creek corridor and turns to head north once again (see section G). The trail passes through riparian habitat along the way. At a certain point, the trail traverses back up the steep bank using bank stabilization treatments.

From the top-of-bank, the trail proceeds along the existing land shelf adjacent to Yerba Buena High School (Section H) until it reaches the northern limits of this section. This also marks the limits of the entire proposed trail at the corner of Roberts Avenue and Phelan Avenue.



TRAIL STANDARDS & GUIDELINES

General Guidelines:

This day-use trail will generally consist of a paved 12-foot trail within an 18-foot wide trail corridor (see figure A, page 1). Specific elements of the trail are:

- asphalt-paved surfacing sloped away from the creek
- painted 4"-wide yellow centerline stripe.
- 2-foot aggregate shoulder on each side of the AC paving
- on the eastern side of the trail (away from the creek), there will be a 2-foot reinforced drainage swale.
- signage (See discussion in below for details)

In the areas where a land easement has been negotiated with the Santa Clara Valley Water District, there will be a required 18 feet of horizontal clearance to accommodate the need for emergency/maintenance vehicular access. In these specific areas, there must also be brief stretches to provide a 22-foot clearance for the set-up and operation of maintenance equipment, and a 25-foot clearance for the passing of these vehicles (see figure L). In both cases, the gravel shoulder will be extended to meet these widths. For safety reasons, dense vegetation will be kept away from the immediate trail and maintained to a limited height to maximize visibility.

Landscape Enhancements:

The primary purpose of this project is to build a continuous trail that is suitable for both commuters and recreational users. Landscape enhancements will be made, but their extent will be a function of the available construction budget.

Plantings: Plantings of low-maintenance locally native vegetation will be used due to three primary objectives. First, trees and shrubs will be used to minimally buffer the trail from adjacent man-made entities such as schools or roads. Second, vegetation such as blackberry will be used to deter human

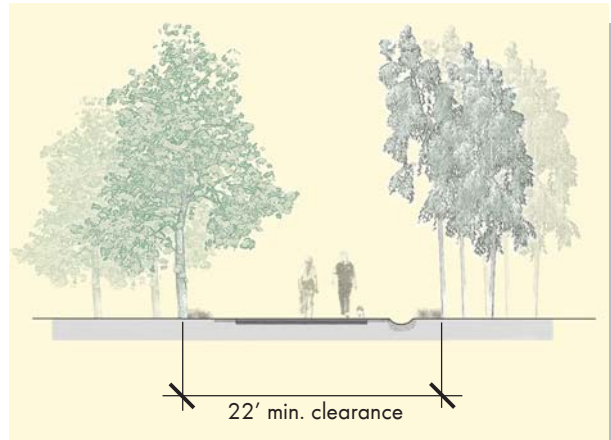


Figure L: 22' horizontal clearance as required at SCVWD easement lands for the set-up and operation of maintenance equipment. Brief stretches of 25' clearance required for the passing of these vehicles.

access from selected areas, such as retaining walls (for safety reasons) and to prevent graffiti. Finally, a native hydroseed mix will be used to re-seed disturbed edges and to aid in erosion control of disturbed slopes. Due to the fact that the existing site contains an extremely healthy, dense stand of trees and vegetation, few additional plantings will be needed for shade or aesthetic purposes. Planting selection for areas directly adjacent to the trail shall be below 36-48" for visibility. Plant material needs to be grown from seed or stock indigenous to this portion of the Coyote watershed.

Signage/ Emergency Call Boxes: Signs will provide trail identity, educational interpretive information, provide direction and inform users of trail use regulations. All signage will conform to the Coyote Watershed Aesthetic Guidelines. These guidelines include scaling down the size of signs from standard traffic signage to a size more in keeping with the trail usage. In addition, signage will be coordinated w/ the City of San Jose's Department of Transportation Guidelines and the CalTrans Design Manuals.

At major trail access points there will be a map of the trail, trail regulations, and some interpretive information. Regulatory signs state trail hours and relevant regulations. At all intersections there will be control signs indicating rights-of-way and crossing information as well as any directional information. Interpretive signs will be simple and vandal resistant.

and will provide information on the natural and cultural history of the area and information on the ecology of Coyote Creek.

Trail mileage markers will be provided for every tenth of a mile. Approximately three emergency call boxes per mile of trail will be provided.

Site Furniture: Small trail rest areas, consisting of a bench and a trash receptacle, are proposed at strategic locations throughout the trail. Their frequency will be a function of the available construction budget. Benches will have a center armrest to discourage sleeping. Graffiti resistant benches and trash receptacles shall be selected. A “fitness cluster”, stretching/fitness apparatus will be provided in Reach 5.

Gateways: Gateway structures will be installed at, or near, major arterials (Tully Road) to draw attention to the trail. Gateways may be an artistic element, as shown below, or an architectural feature, such as a column or an arbor.

Public Art:

This portion of the Coyote Creek Bike Trail has been identified as a site for the public art program of the City of San Jose. Sponsored artwork shall be decorative as well as functional such as seating, signage, fencing, furniture, gateways, or sculpture. Concepts shall foster community participation and create a sense of place. Design concepts for the public art program will be developed during the construction documents phase. See previous signage section for further relevant signage design requirements.



Public art

Environmental Impacts:

Issues regarding the impacts of the trail on environmentally sensitive areas were raised during the planning process. These concerns related mainly to the existing sensitive riparian habitat, endangered wildlife species, and storm water runoff impacts on the watershed. The project goals reflected these concerns. Denise Duffy Associates conducted an environmental study of the project limits. The study identifies several areas of concern and recommends mitigation, to be included in the construction of the trail. The results of the environmental study were taken into consideration throughout the development of a preferred trail alignment.

Storm Water Management/ Flood Control:

Storm water runoff from the trail will be drained at away from the creek and collected in a 2-foot reinforced drainage swale (see figure A, page 1). This drainage swale will direct the runoff to a number of catch basins, which will filter the water and discharge it back into the creek at the nearest existing outfalls. Catch basins will contain a filter that satisfies current federal Environmental Protection Agency National Pollution Discharge Elimination System (EPA NPDES) criteria & fits EPA definition of oil/water separator & meets EPA Clean Water Act criteria for best available technology. The drainage swale will be reinforced to support occasional maintenance/ emergency vehicular access. Drain grates will be bike friendly per Caltrans standards. In locations with no outfalls, the trail will sheet drain to the creek with a uniform cross slope. It is necessary to avoid constructing new outfalls into the creek channel due to the associated bank and streambed armoring.

Care was taken to keep the proposed trail out of the 100-year floodplain where possible to avoid temporary closures during extreme flood years.

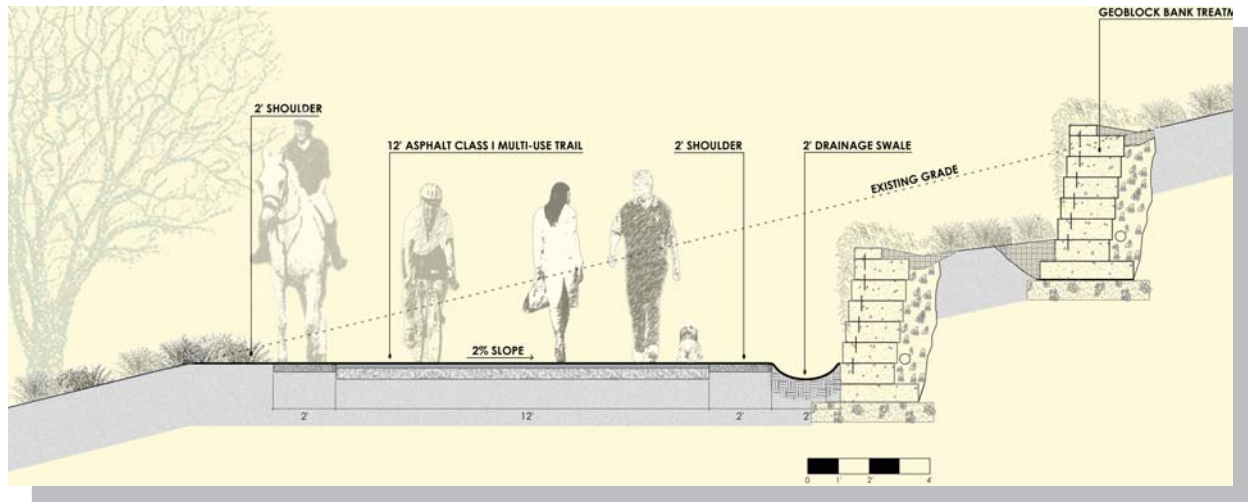


Figure M: Terraced geoblock wall slope retention

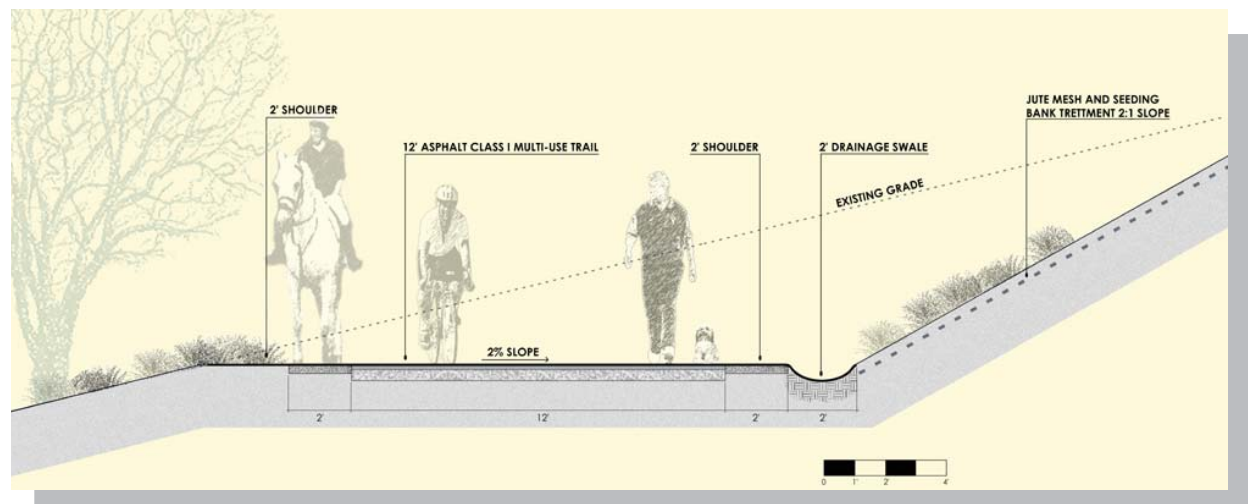


Figure N: Jute mesh and hydroseed slope retention

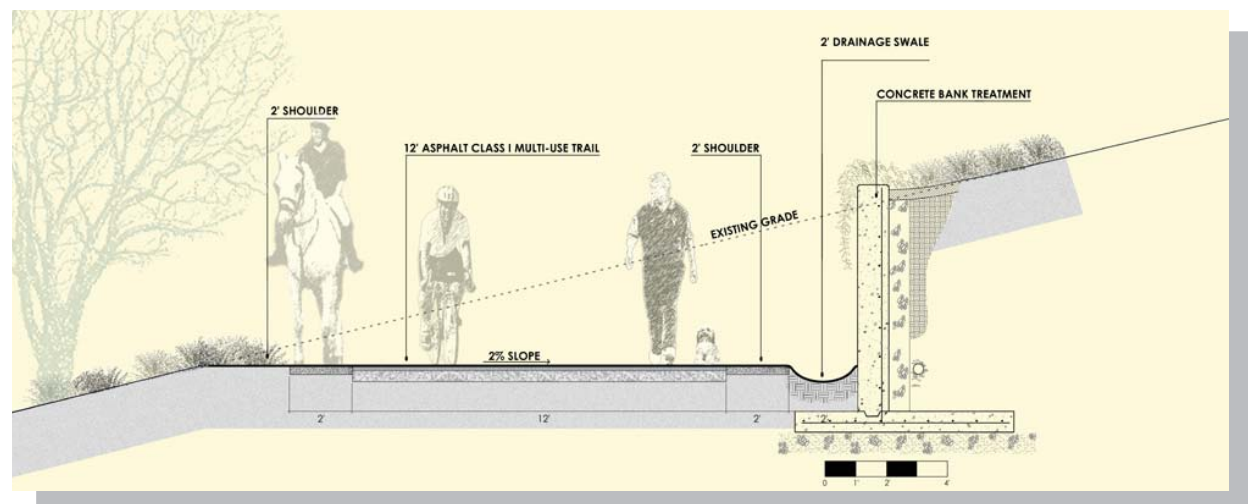


Figure O: Reinforced concrete wall slope retention

Bank Treatments:

Three distinct general treatments are proposed to handle the retention of uphill slopes. The slopes occur in various degrees of steepness along the Coyote Creek Trail:

- 1) Slope retention using a series of terraced, interlocking geoblock walls (see figure M).
- 2) Slope retention using jute mesh and seeding (see figure N)
- 3) Slope retention using reinforced concrete retaining wall (see figure O)

Geotechnical Issues:

A preliminary geotechnical study has been performed by Lowney Associates to evaluate the bank stability in areas that will require significant cut and fill. The feasibility of the previously mentioned bank treatments will also be evaluated in detail during preparation of construction drawings.

Traffic Issues:

Issues regarding the impact of the trail and its users on local parking, traffic, and circulation have been concerns throughout the planning process. Highlighted areas of concern include all points of access along the trail, Galveston Avenue in the vicinity of the Community Gardens, and the new stoplight and crosswalk at the corner of Tully Road and Galveston Avenue. A traffic study has been conducted by Hexagon Transportation Consultants exploring these issues. No significant impacts on parking or traffic were found due to trail construction. This document may be found as part of the environmental document.

Safety & Security Issues:

Emergency vehicle access will be provided for police, fire, and paramedic personnel in conformance with county standards. Emergency vehicle entrance points will be controlled with removable bollards, gates, and/or low curbs. Control gates will be installed at areas subject to flooding. Note: The quantity of police presence on the trail will be determined in the future. It is possible that additional staffing will be needed by police or park rangers to effectively patrol this trail segment.

The trail shall be designed to promote both genuine security as well as perceived security. Where possible, the trail shall have at least 100 feet of both forward and rear visibility on a level grade, particularly at street intersections.

The height of dense vegetation adjacent to the trail shall be limited to avoid blind areas. Adjacent shrubs shall not exceed heights of 36-48". Where possible, dense vegetation shall be cleared at least 5 feet back from the trail's edge. At locations where it is not possible to provide adequate clearance, use of railings shall be explored to inhibit access to dense vegetation. Tree canopies shall be maintained for a 7-8' minimum clearance. Deciduous trees will be used to provide greater visibility in the fall/winter months.

APPENDICES



APPENDIX A

Master Plan

APPENDIX B

Site Analysis

APPENDIX C

Opportunities & Constraints Plan

APPENDIX D

Preliminary Estimate of Probable Construction Cost

Preliminary Estimate of Probable Construction Cost
Coyote Creek Trail Master Plan March, 2004

City of San Jose
Royston Hanamoto Alley & Abey

Trail Reach #1:

- **Trail** (Route inside Tot Lot, adjacent to "Top of Bank")

Item Description	Units	Estimated Quantity	Cost	Subtotal
AC Trail Paving - 3" over 12" base	sf	17,928.00	\$3.85	\$69,022.80
Signage	ea	2.00	\$500.00	\$1,000.00
Tree Removal (6"-8" dia.)	ea	5.00	\$260.00	\$1,300.00
Tree Removal (10"-14" dia.)	ea	1.00	\$350.00	\$350.00
Trail markers	ea	2.00	\$100.00	\$200.00
Small Fence @ Tot Lot (Wrought-Iron)	lf	75.00	\$39.60	\$2,970.00
Drainage swale	sf	2,988.00	\$9.00	\$26,892.00
Reconfigure Stonegate Tot-lot:	ls	1.00	\$30,732.00	\$30,732.00
Subtotal Trail :				\$132,466.80
20% Contingency				\$26,493.36
15% Profit & Overhead				\$19,870.02
Total Trail Reach 1:				\$178,830.18

Trail Reach #2:

- **Trail** (Cross Remnant Woodland via culvert, end just before Tully Rd.)

Item Description	Units	Estimated Quantity	Cost	Subtotal
AC Trail Paving - 3" over 12" base	sf	24,708.00	\$3.85	\$95,125.80
Emergency phone	ea	1.00	\$2,500.00	\$2,500.00
Signage	ea	3.00	\$500.00	\$1,500.00
Move Fencing @ Stables	lf	320.00	\$2.50	\$800.00
Tree Removal (6"-8" dia.)	ea	3.00	\$260.00	\$780.00
Benches	ea	2.00	\$2,200.00	\$4,400.00
Tree Removal (20"-30" dia.)	ea	1.00	\$1,000.00	\$1,000.00
Trail markers	ea	2.00	\$100.00	\$200.00
Drainage swale	sf	4,118.00	\$9.00	\$37,062.00
Retaining Wall (Concrete, 3-8')	cy	18.00	\$900.00	\$16,200.00
Pipe & Associated Grading	lf	25.00	\$61.00	\$1,525.00
Subtotal Trail :				\$161,092.80
20% Contingency				\$32,218.56
15% Profit & Overhead				\$24,163.92
Total Trail Reach 2:				\$217,475.28

Note: "Non-construction costs" may include an easement w/ Police Stables land (5,400 square ft.)

Trail Reach #3:

- **Trail** (Cross Intersection at Tully Rd. & Galveston Ave and proceed north on Galveston to intersection with Summerside Drive.)

Item Description	Units	Estimated Quantity	Cost	Subtotal
AC Trail Paving - 3" over 12" base	sf	13,340.00	\$3.85	\$51,359.00
Emergency phone	ea	2.00	\$2,500.00	\$5,000.00
Signage	ea	6.00	\$500.00	\$3,000.00
Drainage swale	sf	2,278.00	\$9.00	\$20,502.00
Concrete walk	sf	2,625.00	\$8.50	\$22,312.50
Crosswalk Striping	lf	240.00	\$0.65	\$156.00
Subtotal Trail :				\$102,330
20% Contingency				\$20,466
15% Profit & Overhead				\$15,349
Total Trail Reach 3:				\$138,145

Trail Reach #4 & #5:

- **Trail** (Route in creek channel, end @ Yerba Buena High School)

Item Description	Units	Estimated Quantity	Cost	Subtotal
AC Trail Paving - 3" over 12" base	sf	63,792.00	\$2.65	\$169,048.80
Tree Removal (6"-8" dia.)	ea	165.00	\$260.00	\$42,900.00
Tree Removal (10"-14" dia.)	ea	100.00	\$350.00	\$35,000.00

Tree Removal (20"-30" dia.)	ea	80.00	\$1,000.00	\$80,000.00
Grading/ Earthwork	cy	1,200.00	\$4.31	\$5,172.00
Retaining Wall (Concrete, 6'-12')	cy	380	\$1,100.00	\$418,000.00
Drainage swale	sf	10632	\$9.00	\$95,688.00
Trail Markers	ea	7	\$100.00	\$700.00
Emergency Phone	ea	3	\$2,500.00	\$7,500.00
Drainage swale	sf	10632	\$9.00	\$95,688.00
Fitness cluster	ea	1	\$18,000.00	\$18,000.00
Trash Receptacle	ea	2	\$1,200.00	\$2,400.00
Identity Signage	ea	9	\$500.00	\$4,500.00
Benches	ea	5	\$2,200.00	\$11,000.00

Subtotal Trail : **\$985,596.80**

20% Contingency **\$197,119.36**

15% Profit & Overhead **\$147,839.52**

Total Trail Reach 4 & 5: **\$1,330,555.68**

Note: "Non-construction costs" may include an easement w/ Private land (3,520 square ft.)

Total Entire Trail: **\$1,865,005.97**

APPENDIX E
Preliminary Estimate of
Probable Construction
Cost - Stonegate Tot Lot
Alterations



Preliminary Estimate of Probable Construction Cost
Coyote Creek Trail Master Plan

City of San Jose
Royston Hanamoto Alley & Abey

Stonegate Tot Lot Alterations:

- **Trail Alt. 'B'** (Route inside Tot Lot, adjacent to 'Top of Bank')

<i>Item Description</i>	<i>Units</i>	<i>Estimated Quantity</i>	<i>Cost</i>	<i>Subtotal</i>
Relocate existing concrete benches	ea	7.00	\$100.00	\$700.00
Relocate existing boulders	ea	29.00	\$100.00	\$2,900.00
Remove & reinstall swing apparatus & structure equip.	ls	1.00	\$3,600.00	\$3,600.00
New concrete curbs	lf	220.00	\$29.00	\$6,380.00
New 4' wrought iron fence	lf	75.00	\$39.60	\$2,970.00
New sand	cy	7.00	\$29.50	\$206.50
New engineered wood fiber	sf	1,431.00	\$1.80	\$2,575.80
New resilient matting	sf	350.00	\$18.70	\$6,545.00
New concrete base for resilient matting	sf	350.00	\$5.30	\$1,855.00
Adjust irrigation	ls	1.00	\$3,000.00	\$3,000.00
Subtotal:				\$30,732.30
<i>20% Contingency</i>				<i>\$6,146.46</i>
Total Relocation Cost				\$36,878.76

APPENDIX F
Amendment to Initial
Study / Mitigated
Negative Declaration



Coyote Creek Trail Master Plan
Amendment to Initial Study/Mitigated Negative Declaration
February 14, 2005

The Initial Study/Mitigated Negative Declaration for the Coyote Creek Trail Master Plan was circulation to the public from January 11, 2005 to February 11, 2005. No comments were received from the public or public agencies during the 30-day review period.

Minor revisions to the text of the Initial Study/Mitigated Negative Declaration are provided below, in amendment form. The revisions are listed by page number. All additions to the text are presented in underline, and deletions are shown as ~~stricken~~.

Page 25, first paragraph, the first sentence (partial) is revised as follows:

Facilities Division ~~and Santa Clara Valley Water District~~ shall implement remedial measures should the success criteria not be achieved in any of the five monitoring years.

Page 29, first paragraph under Geology and Soils, the first paragraph is revised as follows:

A geotechnical feasibility review of the project site was conducted by Lowney Associates (December 12, 2003), and is contained in Appendix C B.

Page 39, first paragraph under **Transportation/Traffic**, the last sentence is revised as follows:

The trail is intended for recreational and commuting purposes. ~~, although~~ Some students may use the trail to travel to school since Stonegate Elementary and Yerba Buena High School are located along the proposed alignment.